

U.S. Army Corps of Engineers



HISTORY OF THE U.S. ARMY CORPS OF ENGINEERS

The Corps of Engineers, Department of the Army, celebrates 16 June as the anniversary of its founding. It was on that day in 1775 that the Continental Congress authorized one chief engineer and two assistants for the “Grand Army,” and one chief engineer and two assistants “in a separate department.” The Continental Congress, on 27 December 1776, authorized General Washington to raise and collect an engineer force for a period of 6 months, and on 11 March 1779, resolved that “the engineers in the service of the United States shall be formed into a Corps and styled the Corps of Engineers.”

During the early history of the Corps, an emblem in the form of a button bearing the word “Essayons” (Let us try), was adopted by the Corps of Engineers for its uniform. This official emblem, a turreted castle, was first authorized as the Corps of Engineers insignia in 1840. Previously it had been worn as part of the uniform of the Corps of Cadets at the U.S. Military Academy, West Point, which, until 1866, was under the supervision and direction of the Chief of Engineers. The official Engineer flag, with its white castle on scarlet background, was adopted in 1868.

After the Revolution the mission of the Corps was to train engineers and line officers for the Army and to fortify the coast and frontier. For many years the U.S. Military Academy and the Corps were to be the principal means of educating and training engineers in the United States. Most of our early civilian educators in engineering schools also came from this source.

Spurred by the War of 1812, the Corps recognized the critical need not only for fortifications but also for roads, waterways and harbors to move troops and supplies and to facilitate economic expansion. While the construction of such improvements at that time was a state, local or private responsibility, the Army Engineers were constantly called upon for engineering assistance. By 1824 it was recognized that the kind of transportation network most essential to national growth was not being built. Congress directed the Corps to plan a national transportation system that would weld the nation together. The Army Engineers began to improve national roads, help build state, local and private canals and improve rivers and harbors that were needed to serve rapidly increasing navigation activity.

Army Engineers surveyed the routes for the early railroads, supervised construction of the first section of the Baltimore and Ohio in 1827, and for many years were the major source of railroad construction skill. The Army Engineers located the routes and facilitated the construction of our first Western Trans-continental railroads.

Gradually progress was made on our pioneer transportation network. Major efforts were concentrated first on the Mississippi and the Ohio Rivers. To make these streams navigable, even by the relatively

shallow-draft steamers of that day, was an engineering task Mark Twain once described as “making the Mississippi over again--a job transcended in size only by the original job of creating it.” Over a century ago, the Army Engineers began development of the Great Lakes navigation system, which played a vital part in providing the abundance of iron and steel for our phenomenal growth. In 1841 the Army Engineers began to survey and chart the Great Lakes, a mission still being performed.

During the 1840's a new and highly significant phase of Army Engineer efforts began. These were the engineering and scientific missions sent out to explore, survey and map the West and to record for the first time the resources it contained. These expeditions, which carried on until the latter part of the 19th century, collected information on meteorology, geology, mineralogy, zoology, botany, Indian culture and many other things. They did much to stimulate the development of the West, and added immensely to the scientific knowledge of those subjects.

In 1857 the first successful seagoing hopper dredge was developed to deepen Charleston S.C. harbor, giving the Corps a means that has made it possible to open up the naturally shallow Atlantic coastal harbors for deep-draft navigation. This deepening of our harbors has had a major effect on our emergence as a modern maritime nation.

The period following the Civil War saw the rapid rise of the railroads and a steady rise in modern barge traffic developed on our inland waterways. Floods along the lower Mississippi became a menace that could no longer be ignored, and the Corps took over the Herculean task of building a continuous levee system, still one of the greatest construction accomplishments of all time.

After the turn of the 20th century, the Corps of Engineers' General George W. Goethals was given the task of completing the Panama Canal, which opened in 1914. Since that time, Army Engineers have served as Governors of the Canal Zone and supervised its operations.

By 1908, the country was aware of the importance of water as a natural resource and the need for good planning for its comprehensive use and conservation. This was a radically new concept, far removed from the single-purpose, piece-meal method of trying to control and improve rivers in the past. The greatest advances made in water resources development came in the period between the two World Wars. Congress gave the Corps national responsibility for flood control in 1936 and authorized it to carry out comprehensive surveys, embracing power, navigation, flood control, irrigation and other water uses, for each of the nation's river basins. Each survey was to deal with a river system as a single entity and to consider all of the problems and uses of water encountered by our complex, industrial society, and to present a plan of development. By the outbreak of World War II, the Corps had made comprehensive reports on nearly 200 rivers, including almost all of the major basins. Great multi-purpose dams such as Fort Peck on the Missouri and Bonneville on the Columbia were already in service, and the Corps was poised to go ahead with an extensive program of development. But war again called a halt to internal development.

World War II was an “Engineers War” in the words of General MacArthur, himself a former Army Engineer. As in the past, the Army Engineers were cast in the role of the advance element of combat. They became expert in amphibious landings, carrying fighting men, their equipment and supplies from ship to shore and establishing them on the beach, under fire. Engineer troops carried out 44 of the 61 major operations of that kind during the war. In that great technological war, one of the most far-reaching of all

assignments was that of an Army Engineer, Lieutenant General Leslie R. Groves, who headed the Manhattan Engineer District which produced the first atomic bomb.

When the fighting in World War II stopped, the Corps moved quickly into the current large and comprehensive water resources development programs. Projects such as the great dams on the Missouri, the Columbia and other rivers were quickly started. These were followed by projects such as the recanalization of the Ohio River, the construction of the St. Lawrence Seaway, the modernization of the Great Lakes navigation system and many others. With a program now based on the concept that the continued phenomenal growth of our country will ultimately require the fullest practical use of virtually all of our water resources, the Corps is working towards the maximum development of our rivers for flood control, navigation, water supply, hydroelectric power, public recreation, and fish and wildlife protection.

Construction for the National Aeronautics and Space Administration has included design, construction and acting as the real estate agency for its manned spacecraft and lunar landing program. One of the features of this program has been the construction of the world's largest building, the \$100 million Vertical Assembly Building. It is more than a block long, nearly as tall as the Washington Monument, and contains more than twice the volume of the Pentagon.

During the Korean War, the Corps of Engineers played an active role and has continued to function as a construction agency in Korea since that War ended. In the Vietnam conflict, the Corps was active in combat engineering as well as being involved in construction operations both in South Vietnam and in other Southwest Asia areas to support our operations.

The Corps of Engineers is also responsible for Engineer military and strategic planning and managing the Army's Nuclear Power Program.

In view of its history, it is not surprising that the Army Corps of Engineers is considered the largest and most highly diversified engineering organization in the entire world.